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THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	David J. Broyles, et al.	§	
Serial No.:	09/965,276	§	Group Art Unit:
Filed:	September 27, 2001	§	Examiner:
For:	Pecan Processing Method And System	§	

PRELIMINARY PATENTABILITY BRIEF

Assistant Commissioner for Patents
Washington, D.C. 20231

Att'y Docket No. 2078-00100
Date: September 4, 2002

Sir:

Before examining the above-noted patent application, the Examiner is respectfully requested to read the following arguments and review the presented evidence regarding patentability of the above-noted invention under 35 U.S.C. § 102(b).

I. SUMMARY

The inventors of the above-noted patent application had dealings with a third party prior to the critical date (one year before filing of the application) that, if taken out of context, could be unreasonably construed to give rise to a statutory bar for this application under Section 102(b). Because of this possibility, the Examiner is respectfully requested to review the following evidence and law to make a determination as to the applicability of Section 102(b) in this case. Applicants submit that the dealings with the third party were merely a mutual agreement to expand the capability of previously patented technology, while at the same time testing the technical viability of several unpatented improvements. Because inventors are allowed to make experimental uses of their ideas before patenting, and further because conception of an idea later shown to be workable does not retrospectively make the idea ready for patenting at the time of conception, Applicants

respectfully submit that their actions in this case do not give rise to a triggering event for Section 102(b) purposes prior to the critical date.

II. THE BROYLES FAMILY EXPERIMENTALLY TESTED IMPROVEMENTS TO THEIR PECAN PROCESSING MACHINE WHILE EXPANDING THE CAPACITY OF THEIR PREVIOUSLY PATENTED TECHNOLOGY.

A. The Broyles Family Owns Previously Patented Technology.

The inventors of the patent application at issue here (the Broyles Family) also are, in whole or in part, the inventors of U.S. Patent No. 5,879,734 issued March 9, 1999 titled “Nut Sheller Bypass Method,” and U.S. Patent No. 6,135,020 issued October 24, 2001 titled “Nut Sheller Bypass,” (hereinafter the “previously patented technology”) included herewith as Exhibits A and B respectively. Generally speaking, the ‘734 patent is directed to a method of processing nuts, and the ‘020 patent is directed to a related structure for processing nuts. The Broyles family had operated in their own facilities a pecan processing machine embodying the previously patented technology, yet capable of handling only the volume of nuts produced by two standard cracker units -- 800 cracks per minute per cracker or 1600 cracks (or nuts) per minute overall.¹

B. Morven Partners, Ltd. Expressed Interest in the Broyles Family’s Previously Patented Technology -- But at Capacities Twice as Large as the Broyles Family Had Ever Previously Handled.

Morven Partners, Ltd. (hereinafter “Morven”) approached the Broyles family about buying a pecan processing machine using the previously patented technology for use in Morven’s San Saba, Texas facility.² The San Saba facility desired a pecan processing machine capable of handling cracked nuts from four parallel operating crackers, or approximately 3200

¹ See Declaration of Michael Broyles, Exhibit J, Paragraph 2.

² See Tab D, March 8, 2000 letter to Mr. Sonny Paddie from Michael Broyles acknowledging Morven’s inquiry.

cracks (nuts) per minute³ -- twice as large as any machine previously built by the Broyles family. Building a machine with the previously patented technology to handle double the volume of nuts was not as simple as doubling the size of the previous machine, due in part to the fact that an outright doubling of the size and number of devices was not necessarily the correct size or the most economical approach.⁴ Further, space restrictions in the San Saba plant required a multi-level or stacked design.⁵ Significant development regarding sizing and arrangement of the various interacting components required before the Broyles family could provide Morven with a pecan processing machine -- a financial undertaking too large for the Broyles family.⁶

Because the Broyles family had not produced a machine using the previously patented technology at the capacities required by Morven,⁷ Morven's request for a machine was turned down.⁸ In response, Morven suggested an arrangement for expansion of the previously patented technology that involved Morven supplying a location for the expansion work⁹, and capital, and the Broyles family supplying the previously patented technology and their time at no charge.¹⁰

³ See Declaration of Sonny Paddie, Exhibit K, Paragraph 2.

⁴ See Declaration of Michael Broyles, Exhibit J, Paragraph 3.

⁵ *Id.*

⁶ *Id.* at Paragraph 4.

⁷ In fact, could not even test a machine of such a size as their pecan processing facility had only two crackers. Declaration of Broyles, Exhibit J, Paragraph 2.

⁸ Declaration of Michael Broyles, Exhibit J, Paragraph 4.

⁹ Declaration of Sonnie Paddy, Exhibit K, Paragraph 3.

¹⁰ See Exhibit D.

C. In Addition to Expanding the Capacity of the Previously Patented Technology, the Broyles Family Wanted to Test Potential Improvements.

In addition to the work to expand the previously patented technology to handle the nut capacity and the stringent space requirements, the Broyles family also had potential improvements that needed experimental verification of their technical viability -- how to convey the secondary cracker product without breaking, and thus devaluing, the nut parts.

1. Conveying the secondary cracker product to the width screens.

In the related art, secondary cracker product¹¹ falls to a pan beneath the cracker, and is moved by a laborer to the next step in the nut shelling process. The Broyles family conceived of the idea of catching and conveying the secondary cracker product onto the width separation screen assembly. However, the Broyles family was not sure if the concept would work at the technical level.¹²

2. Additional separation of nuts returned to the crackers.

Crackers are designed to crack the shells of nuts that have not been previously cracked. Using a cracker to crack nuts that have been previously cracked carries with it the possibility of applying too much force to the shell, and thus breaking the nut part or meat contained therein, reducing the value of the meat.¹³ The '734 and '020 patents describe a method where uncracked nuts and substantially whole cracked nuts are fed back to the cracker, which, in and of itself, represents a vast improvement over the prior art of sending the uncracked and substantially whole cracked nuts to the sheller. The Broyles family, however, believed that the unbroken meat percentages could be improved if substantially only uncracked nuts were returned to the cracker.

¹¹ See Paragraph [0010] of application Serial No. 09/965,276.

¹² Declaration of Michael Broyles, Exhibit J, Paragraph 5.

¹³ See Paragraph [0009] of application Serial No. 09/965,276.

To that end, they had conceived of the idea of performing a thickness separation of this width category, and then sorting only nuts and nut parts having the greatest thickness in a pin sorter, in an effort to send substantially only the uncracked nuts back to the cracker. The Broyles family was unaware if the thickness separation followed by pin sorting would be operational at the technical level.¹⁴

III. *PFAFF* -- THE SUPREME COURT VISITS THE ON-SALE BAR UNDER SECTION 102(B).

“Section 102(b) of the Patent Act of 1952 provides that no person is entitled to patent an invention that has been on sale more than one year before the filing of the patent application.”¹⁵ *Pfaff* lays down a two-part test with regard to determining when a sale has occurred that starts the one-year time clock for patentability under Section 102(b).

First, the product must be the subject of a commercial offer for sale. ...

Second, the invention must be ready for patenting. That condition may be satisfied in at least two ways: by proof of reduction to practice before the critical date; or by proof that prior to the critical date the inventor had prepared drawings or other descriptions of the invention that were sufficiently specific to enable a person skilled in the art to practice the invention.¹⁶

The Supreme Court held in *Pfaff* that the subject invention was on sale more than one year before the critical date, in spite of the fact that the invention had yet to be reduced to practice.¹⁷

Wayne Pfaff was an inventor who began work on a socket for a computer chip in November of 1980 after representatives of Texas Instruments asked him to develop a new device.¹⁸

¹⁴ Declaration of Michael Broyles, Exhibit J, Paragraph 6.

¹⁵ *Pfaff v. Wells Electronics*, 142 L.Ed. 2d 261, 266 (1998) (internal quotations omitted).

¹⁶ *Id.*

¹⁷ *Id.* at 273.

¹⁸ *Id.* at 266.

In response to this request, he prepared detailed engineering drawings that described the design, the dimensions and the materials to be used in making the socket. Pfaff sent those drawings to a manufacturer in February or March 1981.¹⁹

Prior to Pfaff's critical date, he showed a sketch of his concept to representatives of Texas Instruments, and again prior to the critical date, they provided Pfaff a written confirmation of a previously placed oral purchase order for over 30,000 of his new sockets.²⁰ "In accord with his normal practice, Pfaff did not make and test a prototype of the new device before offering to sell it in commercial quantities."²¹

It was not until after the critical date that an actual device was produced by the manufacturer, thus making Pfaff's reduction to practice date after the critical date.²² The test formulated by the Supreme Court was to answer the question of when the one-year time clock started for Pfaff's device, and how the date of his reduction to practice played into the triggering event.

The Supreme Court held that Pfaff's acceptance of the purchase order prior to the critical date fulfilled the first prong of the test.²³ With regard to the second prong of the new test, the Court held that Pfaff's idea was ready for patenting, based on the fact that the drawings produced by Pfaff and provided to the manufacturer, from which the first prototype was made, were created before the critical date and that no changes were made after the critical date.²⁴ Although not explicitly stated, it would be a reasonable assumption that the fact that it was Pfaff's normal practice to not make and

¹⁹ *Id.*

²⁰ *Id.* Thus, the commercial offer for sale prong was not an issue before the Supreme Court.

²¹ *Id.*

²² *Id.* at 267.

²³ *Id.* at 273.

²⁴ *Id.* at 266.

test a prototype of a new device before offering to sell it in commercial quantities also factored into their decision. This holding, however, did not negate operation of the experimental use doctrine.

Nevertheless, an inventor who seeks to perfect his discovery *may conduct extensive testing without losing his right to obtain a patent for his invention -- even if such testing occurs in the public eye.* The law has long recognized the distinction between inventions put to experimental use and products sold commercially.²⁵

Thus, the Supreme Court in *Pfaff* lays out the test that the Examiner must apply on the facts of this case to determine when the clock started for on-sale bar purposes.

IV. APPLICATION OF THE *PFAFF* TEST -- THE ON-SALE BAR IN THIS CASE DID NOT START UNTIL AFTER THE CRITICAL DATE.

The patent application at issue was filed September 27, 2001, making the critical date in this case September 27, 2000. Applicants believe that the patent application at issue does not suffer from invalidity problems under Section 102(b) for failure of both prongs of the *Pfaff* test -- there was no commercial offer for sale, and the invention was not ready for patenting.

A. There was no Commercial Offer for Sale Until After the Critical Date.

Applicants believe that there was no commercial offer for sale in this case based on either of two theories; 1) there was not a sale or offer to sell made based on standard commercial law concepts prior to the critical date; or 2) if there was a sale, the sale was excused based on the experimental use exception.

1. There was no commercial offer for sale in this case.

Applicants believe that there was no commercial offer for sale prior to the critical date in this case; rather, it is the Applicants' position that the agreement between the Broyles family and Morven was to merely expand the previously patented technology. The fact that the arrangement between the Broyles family and Morven was a contractual relationship to expand the previously

²⁵ *Id.* at 270 (emphasis added).

patented technology, as opposed to an outright commercial sale of the device, is best evidenced by a letter from Morven representative Sonny Paddie to Michael Broyles on April 9, 2001.

I would like to share my comments as to how the project was and is being handled. First I will say that I was calling this project R&D but in reality it was only development because the research was done by you guys but as we both know the development was far from being completed. ...

That is the reason that I have encouraged both you and my people to not loose [sic] site that this project was and still is in the development stage. ...²⁶

Here it is clear that this representative of Morven clearly believed the project to be a “research and development” project which, at the time of writing of the letter, April 9, 2001, “was and still is in the development stage.”²⁷

As further evidence that the arrangement between the Broyles family and Morven was a mere expansion project, as opposed to an outright commercial sale of a product, the Examiner is requested to peruse the various correspondence between the Broyles family and Morven contained in Exhibits C-E, those pieces of correspondence describing generally the benefits of the previously patented technology, and general descriptions of the untested improvements. These letters are a stark contrast to the quotation contained in Exhibit F styled “Quotation No. 1025” from Deecam, Inc. (a Broyles family corporation) to Morven. The date of this quotation letter is October 11, 2000, after the critical date, and clearly shows the true first commercial offer to sell a pecan processing machine to Morven.²⁸

²⁶ Exhibit H.

²⁷ *Id.*

²⁸ Although not explicitly stated in Exhibit F, this quotation was for a pecan processing machine currently in operation in Morven’s El Paso pecan processing plant. Declaration of Michael Broyles, Exhibit J, Paragraph 7.

2. Even if there was a sale as to the untested improvements, it would be excused under the experimental use doctrine.

The Supreme Court in *Pfaff* clearly recognized that an inventor may test his discovery without losing rights to patent protection.

[A]n inventor who seeks to perfect his discovery *may conduct extensive testing without losing his right to obtain a patent for his invention -- even if such testing occurs in the public eye.* The law has long recognized the distinction between inventions put to experimental use and products sold commercially.²⁹

In fact, even if the arrangement between the Broyles family and Morven could be considered a commercial offer for sale, which they contend it would not, this alleged sale would still not start the one-year time clock for Section 102(b) purposes because of the experimental use doctrine. This negating of Section 102(b) by experimental use is best exemplified by the recent Federal Circuit case *EZ Dock, Inc. v. Schafer Systems, Inc.*³⁰

In *EZ Dock*, the inventors of a new modular dock system had several prototype dock sections made that were tested at a marina of one of the inventors.³¹ Unused dock sections were in front of a store owned by one of the inventors, and at the urging of a patron, several of the dock sections were sold.³²

Mr. Neitzke agreed to sell to Mr. Greden two dock sections for \$758.43, or seventy-five percent of the final retail price for the same dock system. Mr. Greden purchased the dock [before the critical date].³³

In spite of the fact of the outright commercial sale of a device already in operation in the marina, the Federal Circuit held the Section 102(b) one-year clock did not start at this date of sale. This holding

²⁹ *Pfaff*, 142 L. Ed. 2d at 270 (emphasis added).

³⁰ 276 F.3d 1347 (Fed. Cir. 2002).

³¹ *See id.* at 1349.

³² *Id.* at 1349.

³³ *Id.*

was based on the fact that the inventors had the right to inspect and repair the dock, and did so numerous times at no additional charge, and thereafter made a design change based on the circumstances of use of the dock portions sold to Mr. Greden.³⁴

Judge Lynn³⁵ listed many factors to be considered when determining whether a device's use is sufficiently experimental to negate application of Section 102(b). In particular, Judge Lynn stated:

In determining whether use is commercial versus experimental, this Court has considered a variety of factors relevant to the first part of the *Pfaff* test, including:

- (1) the necessity for public testing,
- (2) the amount of control over the experiment retained by the inventor,
- (3) the nature of the invention,
- (4) the length of the test period,
- (5) whether payment was made,
- (6) whether there was a secrecy obligation,
- (7) whether the records of the experiment were kept,
- (8) who conducted the experiment, and
- (9) the degree of commercial exploitation during testing. ...

We have also considered:

- (10) whether the invention reasonably requires evaluation under actual conditions of use,
- (11) whether the testing was systematically performed,
- (12) whether the inventor continually monitored the invention during testing, and
- (13) the nature and contacts made with the potential customers.³⁶

In the case before the Federal Circuit, the fact that there was, without question, a commercial sale of the dock sections was negated by the fact that the inventors retained the right to inspect and repair the docks, and that a design change was made based on the experimental use.³⁷

Regarding the question that the Examiner must answer, the Broyles family respectfully submits that the question is not even as close as that in *EZ Dock*. With regard to factors (1) and (6)

³⁴ *Id.* at 1350.

³⁵ In a concurring opinion.

³⁶ 276 F.3d at 1357.

above, there was no public testing -- the testing was done under a secrecy agreement between the Broyles family and Morven,³⁸ and was also done within the confines of Morven's San Saba plant, which is not open for public inspection or tours.³⁹ With regard to factors (2), (18), (11) and (12) above, the Broyles family not only retained control over the experiment, but were charged with performing those experiments in order to satisfy Morven that the mechanical arrangements developed (the previously patented technology, as well as the improvements to the previously patented technology) were satisfactory.⁴⁰ With regard to element (5) above, the arrangement between the Broyles family and Morven was not for profit.⁴¹ With regard to element (7) above, records were kept regarding the condition of the pecans shelled in the prototype machine. With regard to element (10) above, the letter from Morven representative Sonnie Paddie to Michael Broyles on April 9, 2001, states that the machine "will still have to be proven to hold up under production strains. By this I mean that moving components will have to prove that they can function under twenty-four hour continuous running."⁴² Thus, it is clear that the prototype device including the previously patented technology, and also the improvements, reasonably required evaluation under actual use circumstances. With regard to factor (13) above, it cannot be argued that Morven, as a company, was a potential customer after the expansion work was complete, but because of the secrecy agreements and limited access to the San Saba plant, no other contacts with the general public were made based on the experimental use.

³⁷ *Id.* at 1350.

³⁸ Declaration of Michael Broyles, Exhibit J, Paragraph 8.

³⁹ Declaration of Sonny Paddie, Exhibit H, Paragraph 4.

⁴⁰ Declaration of Michael Broyles, Exhibit J, Paragraph 9.

⁴¹ *Id.* at Paragraph 10.

⁴² Exhibit H.

Thus, based on the foregoing, Applicants respectfully submit that either the arrangement between the Broyles family and Morven was not a commercial offer for sale of a device (but was rather merely a contractual arrangement to do additional development work), or even if the arrangement was a commercial sale, this commercial sale is excused under the experimental use doctrine.

B. The Various Improvements of the Pending Patent Application Were Not “Ready for Patenting”

The second prong of *Pfaff* clearly states that for the on sale bar to begin, the invention must be ready for patenting.⁴³ The ready for patenting condition may be satisfied in at least two ways:

By proof of reduction to practice before the critical date; or by proof that prior to the critical date the inventor had prepared drawings or other descriptions of the invention that were sufficiently specific to enable a person skilled in the art to practice the invention.⁴⁴

The agreement between the Broyles family and Morven to expand the previously patented technology, and testing of the new concepts, resulted in a prototype device that became operational in October 2000⁴⁵ (*see* Exhibit I, page 3), after the critical date. Thus, this portion of the Supreme Court’s *Pfaff* test does not apply.

The second way to show that an invention is ready for patenting under *Pfaff* is “by proof that prior to the critical date the inventor had prepared drawings or other descriptions of the invention that were sufficiently specific to enable a person skilled in the art to practice the invention.”⁴⁶

⁴³ *Pfaff*, 142 L.Ed. 2d at 272.

⁴⁴ *Id.*

⁴⁵ It is noted that the prototype device that resulted from the expansion effort was removed after seven months of service, and replaced with a permanent machine. Declaration of Michael Broyles, Exhibit J, Paragraph 11.

⁴⁶ *Pfaff*, 142 L. Ed. 2d at 272.

However, “[t]he fact that a concept is eventually shown to be workable does not retrospectively convert the concept into one that was ‘ready for patenting’ at the time of conception.”⁴⁷

In *Space Systems*, the inventor, Dr. Fred Chan, conceived of an idea for improving attitude control of satellites.⁴⁸

[Before the critical date] Ford sent Aerospatiale a document entitled ‘Engineering Change Proposal’ (ECP) which described the prebiasing idea and how Dr. Chan proposed to achieve it, by the steps of storing an estimated disturbance torque, performing a first thruster modulation and response to the stored value, detecting the net position error, and then performing a second modulation in response to the net position error and the stored value. Included were Dr. Chan’s rough drawings, along with an estimate of the cost of developing the system.⁴⁹

The steps in the Engineering Change Proposal were precisely those of claim 1 in the corresponding patent.⁵⁰

The district court held that under the facts of *Space System* there was a commercial offer for sale and the invention was ready for patenting at the time of conception.⁵¹ This holding by the district court regarding ready for patenting was based on the fact the original conception turned out to be workable. The Federal Circuit, however, reversed the holding of invalidity under Section 102(b).⁵²

Although conception can occur before the inventor has verified that his idea will work, ... when development and verification are needed in order to prepare a patent application that complies with the § 112, the invention is not yet ready for patenting.⁵³

⁴⁷ *Space Systems/Loral, Inc. v. Lockheed Martin Corp.*, 271 F.3d 1076, 1080 (Fed. Cir. 2001).

⁴⁸ *Id.* at 1078.

⁴⁹ *Id.*

⁵⁰ *See Id.* (block quote of claim 1).

⁵¹ *Id.* at 1078.

⁵² *Id.* at 1078, 1079.

⁵³ *Id.* at 1080.

Thus, the Court held that even though an inventor's initial conception turns out to be workable, this does not, in retrospect, make the application ready for patenting as of the date of conception.⁵⁴

The holding in *Space Systems* is applicable to the situation which the Examiner must consider. In particular, the Broyles family had conceived of automatically conveying the secondary cracker product into the process, as well as the additional processing to separate the substantially whole cracked nuts from the uncracked nuts; however, those mere ideas were not shown to be workable until some time later.⁵⁵ *Space Systems* holds that just because the original conception is shown to be workable, this does not mean that the invention is ready for patenting at conception. Thus, the Broyles family respectfully submits that the improvements to the previously patented technology were not ready for patenting at the time the agreement to perform the expansion work was consummated.⁵⁶

V. CONCLUSION.

For the reasons stated above, the Applicants respectfully submit that the patent application at issue does not suffer from Section 102(b) problems. Thus, Applicants respectfully request that the Examiner issue the first office action on the merits and prosecution of this case continued under normal course.

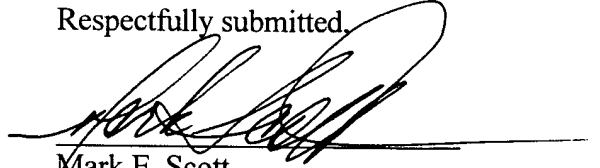
⁵⁴ *Id.*

⁵⁵ Declaration of Michael Broyles, Exhibit J, Paragraphs 5 and 6.

⁵⁶ And as previously discussed, that the agreement was merely to expand the previously patented technology and was not a commercial offer for sale, or even if it was, it was executed under the experimental use doctrine.

If the Examiner has questions or would like additional materials, the undersigned welcomes the Examiner's inquiries.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Mark E. Scott', is written over a horizontal line.

Mark E. Scott

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To:
Don Palmer
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PAGE 1 OF 3

April 12, 2001

To: Don Palmer
Morven Partners, L.P.
From: Michael Broyles
Deecam, Inc.
Date: April 12, 2001

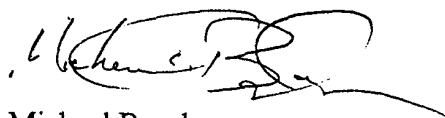
Dear Mr. Palmer,

During our visit yesterday with Sonny, we discussed the updated Sheller Bypass System and received his blessing of the final plan layout. We are all very excited and are confident it will meet all concerns and set a new industry standard.

As you can see, we also received Sonny's signature verifying the accuracy of the Sheller Bypass System benefit in both the western (El Paso) and native (San Saba) plants. As per our agreement and discussion in El Paso, we need your signature confirming the information collected from your production reports over the past six months.

We need this confirmation returned today if possible. Thank you for your time.

Respectfully,

A handwritten signature in black ink, appearing to read "Michael Broyles", with a stylized flourish at the end.

Michael Broyles

April 3, 2001

The following information is accurate as shown:

Native Pecans-

In the native plant there has been an overall half percentage increase of 11.02%. The Sheller Bypass System is handling approximately 30% of the entire production.

The amount of worm size product is decreased by approximately 91% after the Sheller Bypass System v. the conventional method of shelling.


The Sheller Bypass System has been in operation in the native plant since October 2000.

Western Pecans-

In the western plant there has been an overall half percentage increase of 8.93%. The Sheller Bypass System is handling approximately 25% of the entire production.

The Sheller Bypass System has been in operation in the western plant since December 2000.

Don Palmer
CEO
Morven Partners, L.P.


Sonny Paddie
VP Operations
San Saba Pecan Co.
Morven Partners, L.P.